US006011957A

United States Patent [19]

Culbertson et al.

[11] Patent Number: 6,011,957

[45] Date of Patent: Jan. 4, 2000

[54] **POLARITY CHANGE BOX FOR RADIO TRANSMITTER RECEIVER**

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[21] Appl. No.: **08/845,265**

[22] Filed: **Apr. 24, 1997**

[51] **Int. Cl.**[7] **H04B 1/38**

[52] **U.S. Cl.** **455/73**; 455/115; 455/423; 455/67.4; 324/133

[58] **Field of Search** 455/67.1, 67.4, 455/115, 226.1, 423, 73; 324/66, 133, 158.1, 538; 379/6, 27, 29, 30, 32, 2

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[57] **ABSTRACT**

A polarity change box for selectively reversing the polarity of balanced signals and for simultaneously monitoring control and data signals while injecting a test signal. The box includes an input connector and an output connector for receiving and transmitting signals, respectively, and a plurality of circuits for transmitting balanced signals. Each circuit includes a pair of input leads from the input connector and a pair of output leads from the output connector which are electrically connected to a double pole double throw switch. Test points are electrically connected to each output lead. The switch may be selectively positioned in a "normal", "inject", or "reverse" position. In the "normal" position, the first and second input leads are electrically connected to the first and second output leads, respectively, and the output signal has the same polarity as the input signal. In the "inject" position, the switch opens the circuit allowing a test signal to be injected. In the "reverse" position, the circuit reverses the polarity of the input signal by electrically connecting the first and second input leads to the second and first output leads, respectively.

13 Claims, 3 Drawing Sheets